UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,881	10/12/2006	Eric Thelen	DE 040093	5964

24737   7590   12/24/2008
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER
MCGAHEY, CHRISTOPHER S

ART UNIT	PAPER NUMBER
2421	

MAIL DATE	DELIVERY MODE
12/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 October 2006</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-14</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-14</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>12 October 2006</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some *   c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>10/10/2007</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to because the rectangular boxes in Figures 1 and 2 are not shown with descriptive labels, rendering the drawings meaningless without reference to the specification. Brief but descriptive labels should be provided for each rectangular box. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2.   Claim **12** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. It is clear that applicant intends claim 12 to be a dependent

claim, since records indicate that applicant has paid fees for only two independent

claims – claims 1 and 10. However, claim 12 is presently worded as an independent

claim, thereby creating an apparent contradiction that renders the scope of the claim

ambiguous. If the applicant intends claim 12 to be independent, applicant should pay

the appropriate fee. However, if applicant intends the claim to be dependent, thereby

incorporating the limitations of claim 10, then applicant should re-phrase the claim

similar to the following: "The broadcast content storage system according to claim 10,

further comprising: a control module comprising … ." Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims **1**, **6**, and **9** are rejected under 35 U.S.C. 102(b) as being clearly

anticipated by Ellis et al. (US 2002/0174430).

Regarding claim **1**, Ellis discloses "a method for storing broadcast contents,

comprising:

> pre-defining a plurality of content categories (Figures 66-68; ¶0175; Ellis'
>
> > personal preference profiles reads on the claimed "content categories";
> >
> > Users create their own profile(s), and Ellis' system automatically
> >
> > records programs matching that profile.);
>
> defining each of the content categories by at least one content descriptor
>
> > (Figure 12; ¶0227-0228; As part of a personal preference profile, the
> >
> > user may establish a search keyword (i.e., content descriptor).);
>
> receiving broadcast contents, transmitted over at least one broadcast
>
> > transmission channel (item 114, Fig. 1; ¶0161 and ¶0164);
>
> automatically assigning the received broadcast contents, described by a
>
> > content descriptor, to a content category which is defined by the
> >
> > corresponding content descriptor (¶0228, lines 1-6; ¶0175; ¶0161,
> >
> > lines 4-8, "program guide information"; ¶0393, lines 1-9; When the
> >
> > specified keyword is found in a program guide entry, the corresponding
> >
> > program is automatically associated with the user's personal
> >
> > preference profile (i.e., content category).); and
>
> automatically storing the broadcast contents and the assignments of the
>
> > broadcast contents (¶0175, lines 6-13)."

As to claim **6**, Ellis discloses "the method according to Claim 1, wherein the broadcast contents, transmitted over a plurality of broadcast channels, are received simultaneously (¶0170, lines 9-12, "multiple tuners"; ¶0444, lines 7-8 and 14-16)."

As to claim **9**, Ellis discloses "the method according to claim 1, wherein information about the broadcast contents, assigned to the content category, is automatically shown to the user upon selection of the content category (item 4312, Fig. 70; ¶0402, lines 13-15)."

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims **2** and **10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 2002/0174430) in view of Noguchi et al. (US 2005/0008346).

Regarding claim **2**, Ellis discloses the method according to claim 1, but does not further disclose the claimed limitation of "assigning a storage address to each of the content categories, the broadcast contents assigned to a content category being

automatically stored according to the storage address assigned to the corresponding

content category."

Noguchi teaches a multi-disc video disc recording method and system in which

each disc (i.e., a storage address) may be assigned a category or user name (Figures

11 and 12; ¶0121-0124). When a user schedules a program for future recording, the

user specifies the category or user name to be associated with that recording (Figures

13 and 14; ¶0126-0127). The recorder then automatically records the scheduled

program to the appropriate disc (¶0128). Recall that Ellis' system automatically

associates programs scheduled for future recording to a category or user name based

on whether or not a user-specified keyword is present in the program guide information

(Ellis – Figures 12 and 68). Thus, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to modify Ellis light of Noguchi's teaching so

that each user of Ellis' system might have not only a personal preferences profile, but

also a personal disc to which all programs matching the personal profile would be

recorded (Ellis - ¶0393, lines 10-13).

Regarding claim **10**, Ellis discloses "a broadcast content storage system,

comprising:

at least one receiver for receiving broadcast contents transmitted over a

broadcast channel (Ellis – item 202, Fig. 2A; ¶0170, lines 1-3 and 6-9);

a storage unit for storing broadcast contents (Ellis – item 204, Fig. 2A;

¶0171); and

a processing unit configured in such a way that the received broadcast

contents, described by a content descriptor, are automatically assigned

to a content category defined by the corresponding content descriptor

(Ellis – ¶0228, lines 1-6; ¶0175; ¶0161, lines 4-8, "program guide

information"; ¶0393, lines 1-9; The claimed "processing unit," though

not explicitly disclosed in Ellis, is inherent to Elli's set top box [202]

and/or recording equipment [204].)."

However, Ellis does not further disclose that the claimed processing unit is configured in

such a way "that the broadcast contents assigned to a content category are

automatically stored in the storage unit under allocation to the corresponding content

category."

As discussed in the claim 2 analysis above, Noguchi teaches a multi-disc video

disc recording method and system in which each disc (i.e., a storage address) may be

assigned a category or user name (Figures 11 and 12; ¶0121-0124). Programming

designated for a particular category or user name is automatically recorded to the

appropriate disc (¶0128). Thus, it would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify Ellis light of Noguchi's teaching so that

each user of Ellis' system might have not only a personal preferences profile, but also a

personal disc to which all programs matching the personal profile would be recorded

(Ellis - ¶0393, lines 10-13).

7.   Claims **3** and **4** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ellis et al. (US 2002/0174430) in view of Wada et al. (US 7,181,128).

        Regarding claim **3**, Ellis discloses the method according to Claim 1, where

information about the stored broadcast contents is shown, according to content

categories [4314, Fig. 70]. However, Ellis does *not* disclose that *quantitative*

information about the stored broadcast contents is shown, as claimed.

        Wada teaches a graphical user interface that displays quantitative information

about stored broadcast contents (Figure 14; broadcast start date and time, program

recording capacity, and erasure date and time). Thus, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to modify Ellis light of

Wada's teaching so that, for example, the user might know long it will be until a

particular stored program is erased, thereby assisting the user in knowing how soon

he/she needs to watch stored programs.

        As to claim **4**, Ellis in view of Wada discloses "the method according to claim 3,

wherein a pre-allocated storage capacity is allotted to each content category (Ellis –

¶0393, lines 10-13), and the degree to which the pre-allocated storage capacity is

occupied is shown (Figure 22 or Ellis; Also, Figure 14 of Wada graphically illustrates

disc usage at the bottom of the screen)."

8.   Claim **5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 2002/0174430) in view of Noguchi et al. (US 2005/0008346) and further in view of Dudkiewicz et al. (US 2002/0092031).

Regarding claim **5**, Ellis discloses the method according to Claim 1, but does not explicitly disclose the further claimed limitation "wherein the received broadcast contents, described by a logical combination of several content descriptors, are automatically assigned to the content category defined by the corresponding logical combination of several content descriptors."

Dudkiewicz teaches a system and method of generating metadata, including a list of relevant keywords (i.e., content descriptors), for broadcast programs (Figure 7). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis in light of Dudkiewicz's teaching such that metadata containing several relevant keywords (i.e., content descriptors) was generated for broadcast content. This would have been done to facilitate improved keyword searching of broadcast content.

However, Ellis in view of Dudkiewicz still does not explicitly teach automatically assigning received broadcast contents to the content category defined by the corresponding *logical combination* of *several* content descriptors (emphasis mine). Ellis *does* explicitly teach assigning broadcast content to a content category defined by *one* content descriptor but is silent as to the use of a logical combination of several descriptors.

Official Notice is taken that the computer programming technique of constructing a keyword-based search around the logical combination of several keywords was well known in the art at the time the invention was made. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis in view of Dudkiewicz such that Ellis' keyword-based recording (Figure 12) could perform a search based on a logical combination of several content descriptors, as claimed. This would have been done to allow the user to perform keyword-based searching and recording in a more targeted and focused manner.

9.   Claims **7** and **8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 2002/0174430) in view of Logan et al. (US 2003/0093790).

As to claim **7**, Ellis discloses the method according to Claim 1, but does not further disclose the claimed limitation "wherein at least one of the beginning and the end of a broadcast content is transmitted as an accompanying signal with the broadcast content." Ellis *does* disclose transmitting program guide information, including program times, to the user (¶0159), but this information is sent either at a different time from the broadcast contents or on a separate communications link (¶0161-0163).

Logan teaches a system for generating metadata (i.e., content descriptors) and transmitting the same as accompanying signals with the broadcast content (¶0046, lines 3-6; ¶0049, lines 1-4 and 8-10; ¶0050, lines 10-12; ¶0136, lines 1-2) to the user. The metadata may include start and stop times of program segments (¶0317). Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis light of Logan's teaching so that Ellis' system would be capable of determining the beginning or end of a broadcast even in the event that the communications link transmitting program guide information to the user became inoperative.

As to claim **8**, Ellis discloses the method according to Claim 1, but does not further disclose the claimed limitation "wherein the content descriptors (OBI, OB2) are transmitted as accompanying signals with the broadcast contents." Ellis *does* disclose that program guide information (i.e., content descriptors) is sent to users, but this information is sent either at a different time from the broadcast contents or on a separate communications link (¶0161-0163).

Logan teaches that metadata (i.e., content descriptors) describing broadcasting content and created at a remote location (item 101, Fig. 1; ¶0045 and ¶0046, lines 1-3) may be transmitted as accompanying signals with the broadcasting content (¶0046, lines 3-6; ¶0049, lines 1-4 and 8-10; ¶0050, lines 10-12; ¶0136, lines 1-2) to the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ellis light of Logan's teaching so that Ellis' system would be capable of categorizing and recording received broadcast content even in the event that the communications link transmitting program guide information to the user became inoperative.

10.   Claims **11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ellis et al. (US 2002/0174430) in view of Noguchi et al. (US 2005/0008346) and further

in view of Wada et al. (US 7,181,128).

        Regarding claim **11**, Ellis in view of Noguchi discloses the broadcast content

storage system according to claim 10, further comprising a display unit for displaying

information regarding the stored broadcast contents according to content categories

(Ellis – Figure 70). However, Ellis in view of Noguchi does not disclose a display unit for

displaying *quantitative* information regarding the stored broadcast contents, as claimed.

        Wada teaches a query interface (items 150 and 51, Fig. 9) for giving commands

to invoke a graphical user interface that displays *quantitative* information about stored

broadcast contents (Figure 14; broadcast start date and time, program recording

capacity, and erasure date and time). Thus, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Ellis in view of

Noguchi in light of Wada's teaching so that, for example, the user might know long it will

be until a particular stored program is erased, thereby assisting the user in knowing how

soon he/she needs to watch stored programs.

        As to claim **12**, Ellis in view of Noguchi discloses a control module for a

broadcast content storage system according to claim 10, comprising:

                a query interface to the broadcast content storage system for requesting

                information regarding the stored broadcast contents, broken down

according to content categories (Ellis – item 212, Figure 2A; Figure

70); and

a display unit for displaying information regarding the stored broadcast

contents, broken down according to the corresponding content

categories (Ellis – item 206, Figure 2A; Figure 70).

However, Ellis in view of Noguchi does not disclose that the query interface may

request or that the display unit may display *quantitative* information regarding the stored

broadcast contents.

Wada teaches a query interface (items 150 and 51, Fig. 9) for giving commands

to invoke a graphical user interface that displays *quantitative* information about stored

broadcast contents (Figure 14; broadcast start date and time, program recording

capacity, and erasure date and time). Thus, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Ellis in view of

Noguchi in light of Wada's teaching so that, for example, the user might know long it will

be until a particular stored program is erased, thereby assisting the user in knowing how

soon he/she needs to watch stored programs.

As to claim **13**, Ellis in view of Noguchi and Wada discloses "the control module

according to claim 12, comprising:

a content selection unit for user selection of a stored broadcast content or

a content category (Ellis – Figures 70 and 36; ¶0311); and

a selection interface to the broadcast content storage system for

transferring information regarding the user selected broadcast content

or content category (Ellis – ¶0311 and 0134; Figure 37; Noguchi -

¶0123, lines 8-10; Noguchi makes it clear that descriptive metadata

about a program is stored on a disc with the program. Thus, for Ellis to

display program information as in Figure 37 when a program is

selected, it is inherent that there is a selection interface connecting the

disc reader/recorder with Ellis' set top box.)."

As to claim **14**, Ellis in view of Noguchi and Wada discloses "the control module

according to claim 12, comprising a content transfer interface to the broadcast content

storage system for transferring a selected broadcast content or broadcast contents of a

selected content category to a local broadcast storage (Ellis – items 9908 and 9922,

Figure 2C; ¶0181-0182; One embodiment of Ellis stores programs on a remote server

[9908]. A local storage device [9924, Fig. 2C] may be used to transfer program content

from the remote server to local storage, as claimed.)."

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Related to claim 4 of the present application, Yap et al. (US

2002/0040475) teaches a DVR feature dubbed the "disk gas gauge," which graphically

shows the amount of storage space used and the amount remaining on a DVR hard disk.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER S. MCGAHEY whose telephone number is (571)270-5670. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. S. M.
Examiner, Art Unit 2421

CHRISTOPHER S MCGAHEY
Examiner, Art Unit 2421
        /Hunter B. Lonsberry/
        Primary Examiner, Art Unit 2421